even the most minimal hydrological connection between that water and navigable waters is sufficient to confer jurisdiction. The Sixth Circuit has reinserted the hydrological connection test by holding that a hydrological connection confers a significant nexus.

This Court should reject the Sixth Circuit's view that even the most minimal hydrological connection between that water and navigable waters is sufficient to confer jurisdiction. The Fifth Circuit has lead the charge in applying a proper reading of what comprises a substantial nexus under *SWANCC*. In *Rice v. Harken Exploration Co.*, 250 F.3d 264 (5th Cir. 2001) the court addressed whether an oil company was liable for the damage to the plaintiffs land from a series of small "discharges that occurred over a considerable period of time" by "ground and surface waters" into "a small seasonal creek" which runs into a navigable river. *Id.* at 265.

The *Rice* Court address groundwater and surface water separately, and found that "ground waters are not protected waters under" the Clean Water Act. *Id.* at 269 (citation omitted). With regards to surface waters the court relied on *SWANCC* to conclude "a body of water is subject to regulation under the [Clean Water Act] if the body of water is actually navigable or is adjacent to an open body of navigable water." *Id.* at 269 (citing *SWANCC*, 531 U.S. at 680). The court noted that the streams the plaintiff sought to protect were "intermittent streams which only infrequently contain running water" and often have "no running water at all." *Id.* at 270.

The *Rice* Court found a lack of evidence that the non-navigable creek is "**sufficiently linked** to an open body of navigable water" to permit jurisdiction, and it would be an "unwarranted expansion" to apply jurisdiction to intermittent streams. *Id.* at 271. The court also found a lack of "evidence of a close, direct and proximate link between" the discharges and

"any resulting actual, identifiable" contamination of a "particular body of natural surface water that satisfies the jurisdictional requirements." *Id.* at 272.

The Fifth Circuit continued its proper reading of *SWANCC* in *United States v. Needham* (*In re Needham*), 354 F.3d 340 (5th Cir. 2003) where oil was "discharged into the drainage ditch" that spilled into a tributary that flows into an "industrial waterway that eventually flows into the Gulf of Mexico." *Id.* at 343. The trial court found that the "neither the drainage ditch" nor the tributary are navigable waters and not "sufficiently adjacent to the navigable waters" and that the spill was therefore "not subject to federal regulation." *Id.* The government argued that its regulatory definition of "navigable waters" includes all "tributaries" of navigable-in-fact waters which covers all waters, excluding groundwater, that have any hydrological connection with "navigable water." *Id.* at 345. The Fifth Circuit refused to bless the government's expansive definition of tributaries:

> In our view, this definition is unsustainable under *SWANCC*. The [Clean Water Act] and the [Oil Pollution Act] are not so broad as to permit the federal government to impose regulations over "tributaries" that are neither themselves navigable nor **truly adjacent to navigable waters**. Consequently, in this circuit the United States may not simply impose regulations over puddles, sewers, roadside ditches and the like; under *SWANCC* "a body of water is subject to regulation . . . if the body of water is actually navigable or adjacent to an open body of navigable water."

Needham, 354 F.3d at 345-46 (citing *Rice*, 250 F.3d at 269).

The *Needham* Court noted that the government's

definition of tributaries would push the "outer limits of the *Commerce Clause* and raise serious constitutional questions" and that *SWANCC* "rejected such an expansive reading of the" Clean Water Act. *Id.* at 346 n.8. The *Needham* Court observed that: "Under *Rice*, the term "adjacent" cannot include every possible source of water that eventually flows into a navigable-in-fact waterway. Rather, adjacency necessarily implicates a **"significant nexus" between the water in question and the navigable-in-fact waterway**." *Id.* at 347.

The *Needham* Court interpreted the Corps definition of "adjacent" to require a significant measure of proximity to navigable waters, in the following passage:

> The Army Corps of Engineers defines "adjacent" to mean "bordering, contiguous, or neighboring." *33 C.F.R. § 328.3*. However, this regulation was invalidated, at least in part, in *SWANCC*. Nevertheless, the Corps' definition comports with the term's plain meaning. Webster's Third New International Dictionary 26 (1986) offers several definitions: "(a) not distant or far off: nearby but not touching; (b) relatively near and having nothing of the same kind intervening: having a common border: abutting, touching: living nearby or sitting or standing relatively near or close together; and (c) immediately preceding or following with nothing of the same kind intervening." Hence, both the regulatory and plain meaning of **"adjacent" mandate a significant measure of proximity**. Therefore, **including all "tributaries" as "navigable waters"** would negate *Rice's* adjacency requirement, and extend the [Clean Water Act] **beyond the limits set forth in *SWANCC***. *Id.* at 347 n.12 (emphasis added).

Amici submit that the analysis from the Fifth Circuit (*Rice* and *Needham*) applies the correct reading of this *SWANCC* which replaced the "hydrological connection" test with the"significant nexus" test and a minimal hydrological connection between is not sufficient to confer jurisdiction. Otherwise runoff hundreds of miles from navigable waters will confer jurisdiction, allowing the Corps to regulate every drop of water in the United States.

D. Twenty Miles Is Not a Significant Measure of Proximity between the Wetlands on the Rapanos Property and the Navigable Waters to confer Clean Water Act Jurisdiction.

The District court in *U.S. v. Rapanos*, 190 F. Supp. 2d 1011 (ED MI 2002) correctly noted that petitioner Rapano's "property is not directly adjacent to a navigable body of water; it is over twenty miles from Saginaw Bay, and it roughly twenty miles from where the Kawkawlin River -- the nearest body of navigable water -- becomes navigable." *Id.* at 1012. The "nearest body of navigable water to [the Rapanos'] property is roughly **twenty linear miles away**." *Id.* at 1015 (emphasis added).

To reach Clean Water Act jurisdiction over the wetlands over the Rapano's property, the Corps must claim jurisdiction over all tributaries, however trivial or intermittent. The Corps would in effect, regulate all water in every state, because everything above sea level eventually drains into a navigable waterway. This is light of the plain reading of the Clean Water Act which used the words "the waters of the United States" as opposed to "all water within the United States."

The words of Chief Justice Rehnquist's are instructive: it is "the significant nexus between the wetlands and 'navigable waters'" that must inform our reading of the [Clean Water Act].

SWANCC, 531 U.S. at 168. Because, as Justice Stevens points out, [*SWANCC*] has substantially altered the meaning of "navigable waters" in the [Clean Water Act], a "significant nexus" must constitute more than a mere "hydrological connection." *SWANCC*, 531 U.S. at 176-77 (Stevens J., dissenting). The Sixth Circuit has essentially ignored this Court's instructions and maintain the hydrological connection status quo.

The Corps regulations do not define tributary.[5] Hence, it must be given its common and ordinary meaning. The common, roadside drainage ditch bordering property cannot be reasonably construed in common parlance to be a tributary. Even if, however, the ditch can be said to be a "stream" and therefore a tributary, it is not a tributary twenty miles from a navigable river. The attenuated link between the wetlands on the Rapanos property and the navigable river precludes labeling the runoff from the wetlands as a tributary. The main ditch on the Rapanos property does not qualify as a tributary because it is not contiguous or adjacent to navigable waters. The argument that navigable waters includes all tributaries of navigable waters is unsustainable under *SWANCC*.

The Clean Water Act is not so broad as to permit the Corps to impose regulations over tributaries that are neither themselves navigable nor truly adjacent to navigable waters. It is doubtful that Congress authorized the Corps to assert its jurisdiction in such a sweeping and constitutionally troubling manner. Even if that traditional meaning may be stretched, in combination with a broad understanding of "navigable waters,"

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[5] The Corps 1975 regulations define "Primary tributaries" as "the main stems of tributaries directly connecting to navigable waters of the United States up to their headwaters and does not include any additional tributaries extending off of the main stems of these tributaries." 33 C.F.R. 209.120(d)(2)(ii)(e).

to reach most rivers, streams, and lakes, and waters and wetlands closely related to them, it cannot conceivably apply to a drainage ditch twenty miles removed from a navigable river. This would have far-reaching consequences, and impose severe limitations on a landowner's use of their land.

II. THE PROPER JURISDICTIONAL ANALYSIS UNDER THE CLEAN WATER ACT DOES NOT CONFER JURISDICTION IF THE WETLANDS LACK ANY CONNECTION TO NAVIGABLE WATERS.

A. The Clean Water Act Does Not Extend to Wetlands Adjacent to Nonnavigable Tributaries Where the Runoff Does Not Enter The Nonnavigable Tributaries.

SWANCC affirmed that it "was the **significant nexus** between the wetlands and navigable waters that informed [its] reading of the [Clean Water Act] in *Riverside Bayview Homes*." *SWANCC*, 531 U.S. at 167. The significant nexus was found in *Riverside Bayview Homes* because the wetland were "actually abut[ting]. . . a navigable waterway." *Riverside Bayview*, 474 U.S. at 131, 135.

In *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985) a developer sought to build a housing development on 80 acres by filling wetlands on property "**adjacent** to a body of **navigable water** . . . Black Creek, a navigable waterway."*Id.* at 131. The "property is part of a wetland that **actually abuts on a navigable waterway**." *Id.* at 135. The issue was "limited" to whether the Corps could "exercise jurisdiction over wetlands adjacent" to navigable waters. *Id.* at 131. The opinion twice expressly declined to hold that the Corps may exercise jurisdiction over "wetlands that are

not adjacent to bodies of open water." *Id.* at 131-32 n.8 and 124 n.2.[6]

The majority opinion in *SWANCC* repeatedly refers to the wetlands at issue in that case as "isolated" despite the fact that, as the dissent points out, even the most seemingly 'isolated' wetlands are in fact both hydrologically connected, as well as ecologically connected, to navigable waters. *SWANCC*, 531 U.S. at 176, n.2 (Stevens J., dissenting). The dissent notes that the wetlands are at least ecologically connected and "anything but isolated." *Id.* Despite this, the majority still refers to the wetlands as isolated. This lead the *SWANCC* majority to conclude that even if there is a hydrological connection, the wetlands are isolated for purposes of the Clean Water Act. *Id.* at 171-72.

B. The Drainage Ditch Along Carabell's Property Is Not Adjacent to Navigable Waters.

The Sixth Circuit noted in *Carabell v. U.S. Army Corps*, 391 F.3d 704 (6th Cir 2004) that when the ditch was excavated on the Carabell's property "the spoils were cast to either side of the ditch, creating upland berms approximately four feet wide along the banks of the ditch. The berm edging the Carabells' property serves to **block immediate drainage of surface water out of the parcel into the ditch**." *Id.* at 705 (emphasis added). The Carabell property is adjacent to a ditch which connects to tributaries of navigable waters, however, the ditch on "Carabells' triangle-shaped property is separated from wetlands only by a

---

[6] The Supreme Court did not "express any opinion" on the "question of the authority of the Corps to regulate discharges of fill material into wetlands that are not adjacent to bodies of open water." *Riverside Bayview Homes*, 474 U.S. at 131-32 n.8. Also, "wetlands not necessarily adjacent to other waters" 33 C.F.R. §§ 328.3(a)(2) and (3) was "not now before" the court. *Id.* at 124 n.2.

man-made berm or barrier." *Id.* at 708. The Sixth Circuit concluded that the wetlands on the "Carabells' property are separated from a tributary of 'waters of the United States' only by a man-made berm or barrier, they are considered 'adjacent wetlands' under § 328.3(a)(7). As such, the wetlands at issue in this case fall within the jurisdiction of the Corps for purposes of the CWA." *Id.* at 709.

The wetland in *Riverside Bayview Homes* served "to filter and purify water draining into adjacent bodies of water." *Id.* at 134-35. However, wetlands on Carabell's property "block immediate drainage of surface water out of the parcel into the ditch." *Carabell*, 391 F.3d at 705. There is no nexus with the navigable river. The runoff on the Carabell's property does not reach the navigable river, and the lack of nexus with the navigable river is certainly not significant.

The term adjacent cannot include every possible source of water that eventually flows into a navigable-in-fact waterway. Rather, adjacency necessarily implicates a "significant nexus" between the water in question and the navigable-in-fact waterway. This requires the adjacent body of water be "sufficiently linked" to the navigable-in-fact water. The Corps regulations define "adjacent" as "bordering, contiguous, or neighboring." 33 C.F.R. § 328.3(c). However, the connection between the drainage ditch and the Carabell property is separated by a man-made berm and is far too attenuated to become waters of the United States within the meaning of the Clean Water Act. The attenuated connection between the ditch enclosure and the waters of the United States is significant evidence that the drainage ditch is not adjacent.

The Clean Water Act provides for jurisdiction over "navigable waters," defined as "waters of the United States." Nothing in that language, other provisions of the Clean Water Act, or legislative history shows a clear indication or

unmistakable intention to reach waters that are not connected to navigable waters.

Since the ditch running along the Carabells' property is separated from wetlands only by a man-made berm or barrier. It is logical that this would limit the entrance of any pollution on the property from entering the downstream waters. This would also limit sediment transport from the property to downstream navigable waters. By berming the property a landowner should be able to remove the property from the Corps jurisdiction as this would limit any substantial nexus to the navigable waters. However, the Corps would assert that the manmade berm is jurisdictional. In effect, a landowner is not permitted to enclose the wetlands or creeks on its property. However, if the purpose of the Clean Water Act is to restore and maintain clean water, then this enclosure should be encouraged. Unless the Corps has converted the Clean Water Act into a wildlife conservation act.[7] If so, this should change should be spelled out by Congress, and not the Corps. The *SWANCC* majority noted that "where an administrative interpretation of a statute invokes the outer limits of Congress' power, we expect a clear indication that Congress intended that result." *SWANCC* at 172.

Any connection between the runoff from the property and navigable waters is highly attenuated at best, and the drainage ditch on the property could be deemed a tributary by wrenching the word of its plain meaning, and thereby stepping outside the Corps statutory and constitutional boundaries.

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[7] The "Clean Water Act is not a comprehensive wildlife protection statute. Although the Act mentions wildlife as an important result of controlling pollution, the purpose of the Act is to restore and maintain clean water, not to conserve wildlife." *Hoffman Homes, Inc. v. EPA*, 961 F.2d 1310, 1322 (7th Cir. 1992), vacated, 975 F.2d 1554, adopted, 999 F.2d 256, 262 (7th Cir. 1993) (Manion, J., concurring).

C. Federal Jurisdiction over Adjacent Wetlands must Be Scrutinized Carefully Because Land Use is an Area of Traditional Local Control.

In enacting the Clean Water Act, Congress never suggested that it intended to usurp traditional local authority over all surface drainage courses, or that it intended to upset the federal-state balance by regulating all waters and wetlands, however trivial and far removed from any navigable waterbody. Congress did not intend to sweep within federal jurisdiction, all surface runoff, however minuscule or intermittent, within the country. This effects a massive intrusion of federal power into land use decisions that by tradition are the province of the States. Nonetheless, the Corps is now attempting to direct local development activities, e.g., the enclosure of ditches, and the grading of soil for homebuilding.

When Congress enacted the Clean Water Act, it attempted to preserve the authority of the States, stating that "[i]t is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources." 33 U.S.C. § 1251(b).

However, the Corps regulation prohibit a property owner by enclosing its property from navigable waters. This clearly prevents the discharge of pollutants to be controlled at the source by preventing their entry into navigable waters. Unfortunately, if a property owner seeks to encircle his land with berms so that the waters no longer leave his property, the man-made berms do not prevent the Corps jurisdiction.

This confirms the severe federal intrusion into areas of traditional state and local control by the Corps. Congress clearly tried to strike a careful balance, asserting federal authority where

necessary to protect strictly federal interests, while promoting a voluntary federal-state partnership in matters beyond the reach of the federal government, and preserving State authority elsewhere. The Corps usurpation of local land use, can only be justified by a clear statement of congressional intent. Not only is such a statement lacking in the Clean Water Act, but Congress made explicit in the Act its intention to preserve state and local land use regulation.

While Congress intended the Clean Water Act to encompass "at least some waters that would not be deemed 'navigable' under the classical understanding of that term," *Riverside Bayview*, 474 U.S. at 133, there is no reason to believe that in using the familiar terms "navigable waters" and "waters of the United States," Congress suddenly meant to regulate all drainage flows. There simply is no statutory support for the claim that federal jurisdiction extends over all drainways in the nation, or that a parcel of land can be regulated by the Corps as long as rain falling in the area "eventually" drains downstream via a roadside drainage ditch. Indeed, it is beyond belief that Congress ever could have envisioned the Clean Water Act being applied to assert federal jurisdiction to regulate common, every-day roadside drainage ditches simply because of an ultimate connection to a far-off navigable waterway. Such an intrusion, and on such a monumental scale, into a matter of such long-standing state and local concern would, if intended, surely have been mentioned in the legislative process. It was not.

Given its "particular duty to ensure that the federal-state balance is not destroyed" with respect to "traditional concern[s] of the States." *United States v. Lopez*, 514 U.S. 549, 580-581 (1995) (Kennedy, J., concurring). By prohibiting the development of land which seeks to close itself from navigable waters, the Corps is able to bar projects that have been approved by state and local authorities based on the Corps view that they do not comport with the "public interest." 33 C.F.R. § 320.4(a).

See *Lopez*, 514 U.S. at 564 ("if we were to accept the Government's arguments, we are hard pressed to posit any activity by an individual that Congress is without power to regulate.")

The Corps limitless jurisdiction intrudes upon traditional local authority to control the use, development, and preservation of land and water resources that Congress expressly recognized in the Clean Water Act. The Corps utterly limitless assertion of federal jurisdiction obliterates any "distinction between what is truly national and what is truly local," *Lopez*, 514 U.S. at 564, 568. The Corps aggrandizement of its own authority to regulate man-made berms which prevent water from flowing to navigable rivers is clearly not found in the Clean Water Act.

III. CONCLUSION.

The Corps regulatory authority under § 404 of the Clean Water Act has limits, and those limits forbid its regulatory authority over the enclosure of small intrastate ditches, miles from navigable waters. The Corps has not shown any discernible effect on interstate commerce, much less a substantial one, caused by enclosing small intrastate ditches. The Corps does not have § 404 authority to regulate the enclosure of property where the runoff does not reach navigable waters, or where the runoff travels many miles from navigable waters. The judgment of the Sixth Circuit should be reversed in both cases before this Court and judgment should be entered on behalf of the petitioners.

Respectfully submitted,

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Counsel for Amicus Curiae Attainable Housing Alliance

DEC 13 2005 (22) (28)

No. 04-1034 *consolidated with* No. 04-1384

In the
Supreme Court of the United States

JOHN A. RAPANOS *et al.*,
Petitioners,

v.

UNITED STATES,
Respondent.

JUNE CARABELL, *et al.*,
Petitioners,

v.

UNITED STATES ARMY
CORPS OF ENGINEERS
et al.,
Respondents.

On Writs of Certiorari to the United States
court of Appeals for the Sixth Circuit

MOTION OF AMICUS CURIAE JEROME B. CARR, Ph.D. TO FILE A LATE BRIEF IN SUPPORT OF THE PETITIONERS

Brian M. Hurley
Rackemann, Sawyer & Brewster
One Financial Center
Boston MA 02111

MOTION

Pursuant to Supreme Court Rule 37, I have tried to secure written consent for the late filing of the attached *Amicus Curiae* from counsel for the Petitioners and Respondents. Although counsel for the Petitioners granted such consent, counsel for the Respondents withheld it, even though *Amicus* had been told that the Respondents had been granted a time extension for one of their Briefs. Accordingly, I, Jerome B. Carr, Ph.D. telmatologist (wetland scientist) and Certified Professional Hydrologist, author of theBrief *Amicus Curiae* moves this court for permission to late file the Brief *Amicus Curiae* which is submitted herewith. *Amicus* makes this motion on the following grounds.

Amicus curiae, Jerome B. Carr, Ph.D. has 40 years experience in water sciences including hydrology, limnology (study of lakes), meteorology, oceanography, telmatology (study of wetlands), and water quality. For the past 30 years, I have worked mainly in the fields of hydrology and wetland sciences. In 1983, when the Commonwealth of Massachusetts passed more restrictive wetland regulations, the head of the Wetlands Division of the Mass. Dept. of Environmental Protection stated at a meeting presenting the more restrictive regulations, that Mass. was going to protect until we understand how to manage our wetland resources. On the next day I began a program of very thorough research on wetlands, their evolution, and function. I am now the only scientist in Mass. who is a member of the International Peat Society. I found in their Proceedings of the International Peat Congresses, the world class research that I needed for the understanding of wetlands and their function. On those ideas, I conducted my own field research whenever it would serve both my desire for knowledge and my clients' needs. I am a member of nine other professional scientific organizations, and subscribe to over 20 scientific journals. In addition I have built a very large wetland library at the Carr Research Laboratory, Inc. which wasfounded in 1974. When

graduate students select a wetland topic for their M.S. Thesis, and cannot get the references they want from inter-library loan, they have been referred to me and my library for hard to find books and papers. Often, I have almost everything they are looking for, and I supply them with books and papers that they had never found in their review of the technical literature.

The only reason I have for asking for permission to have the court accept this Brief *Amicus Curiae* is because I want to raise and answer **one very fundamental question** that has not been presented to this Court; knowing that this question will make the Court's work far simpler and its decision based on defensible world class hydrology and wetland science. That question is:

> **"How can wetlands physically or jurisdictionally contribute to intra- and/or inter-state or foreign commerce via navigable waters, when most vegetated wetlands have been proven to be net sinks (consumers) of water and thus a detriment to the amount and function of navigable waters?"**

The science based answer to that question is simple, straightforward and direct; and will make the Court's decision far easier by eliminating debate over minutiae.

The only reason I have for asking for acceptance of this late Brief *Amicus Curiae* is because the Clerk's staff at the Supreme Court never returned any of my timely phone calls or voice mails in early November asking for the due date for my Brief *Amicus*. In addition, after making four phone calls in early November requesting this information, I then sent a letter addressed to the Chief Clerk of the court on 23 November requesting the due date. Had I been given the courtesy of a timely phone call, voice mail, or email, I could have met the 2 December 2005 deadline. I only found the deadline date by going on-line and finding the names of the lawyers for the Petitioners. One of them accepted my phone call and that individual was kind enough to tell me thedeadline due date had been one working day prior to my on-line search. Note, that had I been notified on the Monday or Tuesday after Thanksgiving, 28 or 29 November 2005, I could have made the due date of 2 December 2005,

because I would have cancelled all my field work, and expanded my working hours into the late night to finish the Brief *Amicus*.

Note, this work is all *pro bono publico* and neither I nor my firm is being paid for my time and effort. Nobody is prejudiced by this motion or attached Brief.

Wherefore, Jerome B. Carr, Ph.D. respectfully requests that this Court grant *Amicus Curiae* leave to late file the attached Brief in support of linking high quality science to high quality law review by this Court.

Respectfully submitted,

Jerome B. Carr, Ph.D.
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Certified Professional Hydrologist
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Dated: 15 December 2005

Petitioners Consent Letters follow this page.

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6 December 2005

Mr. M. Reed Hopper, Esq.
Pacific Legal Foundation
Suite 200
3900 Lennane DR
Sacramento CA 95834

Dear Mr. Hopper:

As a Certified Professional Hydrologist and a telmatologist (wetland scientist), I am writing to request consent for a late filing of an *amicus* brief from all three parties for Docket Number 04-1034 (John A. Rapanos *et ux et al*), and Docket Number 04-1384 (June Carabell *et al*), and I understand that these two cases have been joined together. My brief will be in support of the petitioners.

The reason why I am making this request for a late *amicus* brief is because I could not get an answer to the question from the Supreme Court Staff on what the due date was for *amicus* briefs. In early and mid-November I phoned the Clerk's Office four times and either spoke to someone or left a voice mail message, and no one ever returned my call. On 23 November 2005, I sent a letter to the Chief Clerk's office at the Supreme Court asking the same question, and I never got a reply. They apparently lacked time to even send me a four or five word e-mail, or a fax, or a 30 second voice mail with a due date. Had I been given the due date of 2 December, it would have been met.

As a professional working with wetlands and hydrology for over 30 years, and as someone who has been doing research on wetland function and evolution for over 20 years, and as the only wetland scientist in Massachusetts who is a member of the International Peat Society, I believe that a few pages of fundamental wetland science will be of great help to the Supreme Court. I recently heard what must be an old saying that "Science and politics don't mix." However, I very firmly believe that science and law should mix since both are based on precision and logic to better serve our citizens in the long run.

Thus I hope that you will be so kind as to write me a Consent Letter granting me permission to submit a late *amicus* brief. I can have it in your hands no later than Tuesday 13 December via express mail, *if* I am granted consent by all three parties by noon on Friday, given that I will need the weekend to produce a document to meet your filing requirements and format. Thank you for your kind and prompt attention to this matter. Please reply by FAX or e-mail if your consent will be granted.

Most cordially,

Jerome B. Carr

Jerome B. Carr, Ph.D.
Telmatologist (Wetland Scientist) &
Certified Professional Hydrologist

Via Fax and Certified Express Mail

As the representative for the Petitioners, John A. Rapanos et al, I hereby consent to this request for a late *amicus* brief.

M. Reed Hopper, Esq. — (Date)

supreme court 3let 05

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6 December 2005

Mr. Timothy A. Stoepker, Esq.
Dickinson Wright PLLC
Suite 400
500 Woodward AVE
Detroit MI 48226-3425

Dear Mr. Stoepker:

As a Certified Professional Hydrologist and a telmatologist (wetland scientist), I am writing to request consent for a late filing of an *amicus* brief from all three parties for Docket Number 04-1034 (John A. Rapanos *et ux et al*), and Docket Number 04-1384 (June Carabell *et al*), and I understand that these two cases have been joined together. My brief will be in support of the petitioners.

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Most cordially,

Jerome B. Carr

Jerome B. Carr, Ph.D.
Telmatologist (Wetland Scientist) &
Certified Professional Hydrologist

Via Fax and Certified Express Mail

supreme court 3let 05

As the representative for the Petitioners, June Carabell et. al. I hereby consent to this request for a late *amicus* brief.

Timothy A. Stoepker, Esq.

12-7-05
(Date)

In the
Supreme Court of the United States
October Term, 2004

No. 04-1034 *consolidated with* No. 04-1384

JOHN A. RAPANOS *et al.*,
Petitioners,

v.

UNITED STATES,
Respondent.

JUNE CARABELL, *et al.*,
Petitioners,

v.

UNITED STATES ARMY
CORPS OF ENGINEERS
et al.,
Respondents.

On Writs of *Certiorari* to the United States
Court of Appeals for the Sixth Circuit

BRIEF OF *AMICUS CURIAE* JEROME B. CARR, Ph.D. TELMATOLOGIST (WETLAND SCIENTIST) & CERTIFIED PROFESSIONAL HYDROLOGIST IN SUPPORT OF THE PETITIONERS ON THE MERITS

QUESTIONS PRESENTED FOR REVIEW

1- "How can wetlands physically or jurisdictionally contribute to intra- and/or inter-stateor foreign commerce via navigable waters, when most vegetated wetlands have been proven to be net sinks (consumers) of water and thus a detriment to the amount and function of navigable waters?"

2- Since someone may suggest that water quality or some other behavior of wetlands may impact navigation; very briefly, how do wetlands affect water quality and other presumed wetland values?"

TABLE OF CONTENTS

QUESTIONS PRESENTED FOR REVIEW i

TABLE OF CONTENTS ii

INTERESTS OF THE *AMICUS CURIAE* 1

JURISDICTION 2

SUMMARY OF THE ARGUMENT 2

ARGUMENT 3

SECONDARY WETLAND FUNCTIONS 6

FIGURE 1 8

CONCLUSION 9

PETITIONERS CONSENT LETTERS After Motion

INTERESTS OF THE *AMICUS CURIAE*

Amicus Jerome B. Carr, Ph.D. seeks to bring to the Court's attention his views and the views logically derived from scientific interpretation of data published in the scientific literature concerning the authority of the Army Corps of Engineers to regulate filling of inland vegetated wetlands under 33 U.S.C. § 1251 *et seq.* ("CWA"). [1]

Amicus curiae Jerome B. Carr, Ph.D. has spent about 85% of his 40 year career to date working on sciences associated with water, including but not limited to description of and/or quantification of waters behavior, its cycling between the atmosphere, its quality, and the life therein. I was a Certified Wetland Scientist in the State of New Hampshire, which was thefirst state of the union which certified individuals in the science, and have been a Certified Professional Hydrologist by the American Institute of Hydrology since 1984. Knowing that both science and the interpretation of the law requires detailed knowledge and precise application of that knowledge to benefit all our citizens and residents, I am seeking to assist the Court by review of the water budgets of open water bodies such as navigable lakes, and the real world impacts of the vegetative wetlands which border our lakes, salt water bodies, and all their tributaries.

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1 Pursuant to Supreme Court Rule 37.6 *Amicus* states that he alone authored this Brief, without benefit of counsel, and that no one other than the *Amicus* made a monetary contribution to the preparation or submission of the brief. Pursuant to Supreme Court Rule 37.3(a) *Amicus* submitted a consent letter to both parties to the filing of this Brief, and counsel for both Petitioners returned signed consent. The Respondents' counsel did not consent.

JURISDICTION

The definition of "waters of the United States" is found in 33 Code of Federal Regulations (CFR) Part 328.3. Wetlands are included as sub-part (7). That inclusion of wetlands as waters of the United States relative to navigable waters should logically apply only to wetlands that are sources of water, and not to net consumers (sinks) of water.

SUMMARY OF THE ARGUMENT

It is well known at the highest levels of hydrologic and wetland sciences, that with very few exceptions, vegetated wetlands are net consumers of water and as such are detrimental to navigable waters. This was initially demonstrated during research on cattail marshes which typically abut open waters or deep marshes (water 6 feet deep or less) in 1911 as reported in "*A Treatise on Limnology*." [2] This has been confirmed by numerous other more recent studies conducted *in situ*.

The published values of average annual evapotranspiration water loses to the atmosphere for the most common vegetated wetlands range from about 1.7 times average annual local lake evaporation to in excess of 3.0 times lake evaporation. When the calculations are done, the water loses from vegetated wetlands exceed, and often far exceed, average annual precipitation. Thus vegetated wetlands are net sinks for waters which degrade the function navigable waterways, and do not help preserve them or their commerce related functions. It turns out that excavation of vegetated wetlands creates more potential navigable water surfaces and thus adds to downstream flows. Also, filling of vegetated wetlands to the extent that

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2 Hutchinson, G. Evelyn; *A Treatise on Limnology*, Volume III, page 196,. John Wily & Sons, New York, 1975.

they become functional uplands also adds to downstream flows. Thus either alteration results in benefits to navigable waters and thus wetlands (a) should not be regulated as waters of the United States, or (b) should not be inhibited by the regulators in a fashion that excludes proposed land use changes, other than by ensuring no downgradient harm to functional open waters by erosion or added flooding.

ARGUMENT

Scientific evaluation of wetland hydrology is typically done by making *in-situ* measurements of (a) interception of rainfall which results in direct evaporation from plant surfaces, (b) direct evaporation from soil surfaces under the plant community, and (c) transpiration (passage of gas or liquid as a vapor through the skin, a membrane or other tissue). The sum of these are called evapotranspiration. In the case of plants, leaves have small pores that allow passageof gas and this is the route to the atmosphere for water taken in by plant roots.

The best way to understand why wetland vegetation pumps more water to the atmosphere than does upland vegetation is to understand how plant roots and soil hydrology interact. In uplands, after a rainstorm, a zone of moisture passes vertically through the soil as groundwater recharge. For the duration of time that this water is in contact with root surfaces, water is taken up by plants and much of that water is released through the leaf pores. In New England, rainfall events are spaced on average about every six days. Thus as the soil drains between rainfall events, there is less and less water available for upland plant uptake. In a wetland environment, groundwater that is recharged in upgradient uplands is discharged into the wetlands. Most wetlands have saturated soils within 12 inches of the surface for allof the year. Thus water is available for uptake by plant roots all year, and there is no constraint to water access for plant transpiration in wetlands, with a possible except during significant droughts.